

PART 1 - GENERAL

- 1.1 Measurement for Payment
- .1 Payment for additional costs resulting from the cultural resource protection procedures shall be included in the relevant items in the table of unit prices for this Contract. Items of additional work for cultural resource protection not specifically included in the unit rate items shall be considered incidental to the work.
 - .2 Payment for “Organic Soils Excavation and Spreading in a Cultural Resource Sites” shall be full compensation for all work necessary and incidental for excavation using a smooth-edge bucket in accordance with clause 3.0 *Controlled Excavation Methodology* at a rate to permit monitoring of the material by the OAM (or their representative), and the re-spreading of the material up to six metres into the adjacent forest area by sprinkling and hand work in accordance with clause 1.8 *Cultural Resource Sites*. Material used to dress the sides of the trail shall be paid as a separate item. Also included in the unit rates tendered is standby time as described in clause 1.6.5 of this section.
 - .3 Payment for “Organic Soils Excavation from Cultural Resource Sites – Storage and Recording - Grice Bay” in Cultural Resource Sites shall be full compensation for all work necessary and incidental for excavation using a smooth-edge bucket in accordance with clause 3.0 *Controlled Excavation Methodology* at a rate to permit monitoring of the material by the OAM (or their representative), loading, hauling the material to the Grice Bay Parking Lot, stockpiling and recording source and deposit locations of the material. Also included in the unit rates tendered is standby time as described in clause 1.6.5 of this section.
 - .4 Payment for “Mineral Soil Excavation and Fill in Cultural Resource Sites” shall be full compensation for all work necessary and incidental for excavation using a smooth-edge bucket in accordance with clause 3.0 *Controlled Excavation Methodology* at a rate to permit monitoring of the material by the OAM (or their representative), hauling the material to a fill area within the archaeology site, and spreading and compacting the material. Not included in this unit rate is standby time.
 - .5 Payment for “Mineral Soil Excavation from Cultural Resource Sites – Storage and Recording - Grice Bay” shall be full compensation for all work necessary and incidental for excavation using a smooth-edge bucket in accordance with clause 3.0 *Controlled Excavation Methodology* at a rate to permit monitoring of the material by the OAM (or their representative), hauling the material to a fill area within the archaeology site, and spreading and compacting the material. Not included in this unit rate is standby time.
 - .6 Payment for “Mineral Soil Excavation, identified to be void of archaeological materials by the OAM, from Cultural Resource Sites – Disposal at J. Robbins Construction Ltd.” shall be full compensation for all work necessary and incidental for excavation using a smooth-edge bucket in accordance with clause 3.0 *Controlled Excavation Methodology* at a rate to
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- permit monitoring of the material by the OAM (or their representative), loading, hauling the material to the J. Robbins site, re-spreading and compacting the material. Not included in this unit rate is standby time.
- .7 Measurement for payment for excavation of these excavated materials shall be by the cubic metre of excavated void (length X width X depth) or surveyed cross sections as accepted by the DR.
- .8 For work within the Cultural Resource Sites (CRS) The Contractor should allow for bidding purposes that their equipment and personnel excavating the trail through the site will be shut down for 2 hours per day. At the end of each pay period the total number of hours working in CRS sites will be compared to the number of hours shut down at these sites. If the hours shut down exceeds 25% (2 hours out of 8) an additional payment will be made for lost time. The “10 minutes per object” is provided as information only to the Contractor to help in planning this work. For example, enough time for a quick rest break, not enough time for machine maintenance or relocate equipment to work elsewhere.
- 1.2 References
- .1 The Parks Canada Guidelines for the Management of Archaeological Resources (Parks Canada, 2005).
- .2 Canada National Parks Act (S.C. 2000, c. 32).
- .3 Cultural Resource Management Policy (2013).
- 1.3 Cultural Significance
- .1 Parks Canada ensures that cultural resources are protected and managed appropriately in accordance with its mandate, Cultural Resource Management Policy, Guidelines for the Management of Archaeological Resources and management directives. Ensuring adequate management of cultural resources consists of preventing, reducing or mitigating impacts to cultural resource sites, artifacts and collections.
- .2 Due to the sensitivity of the cultural resources, information regarding cultural resource sites, materials, artifacts, and locations is confidential. The extent of cultural resource sites that reside within the trail work zone is identified in the Contract by linear metre, however, the Contractor will be notified of their exact locations once the Contract has been awarded. No photographs or information about cultural sites and/or resources will be made public by the contractor or sub-contractors. All materials on cultural resources provided to the Contractor must be returned to the Owner at the completion of the project.
- 1.4 Definitions
- .1 Archaeological Site (AS): a location that contains physical remains of past human activity. Controlled excavation methodology must be followed within an AS. The OAM will be on site observing excavation in these designated areas.
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- .2 Cultural Deposits (CD): sediments and materials laid down by, or heavily modified by, human activity.
 - .3 Cultural Resource Management Zone (CRMZ): a location where there is an increased potential of cultural deposits that were not identified during the cultural resource site impact assessments and inventories. The OAM will be on site observing excavation in these designated areas. The controlled excavation methodology will be followed in these areas under the direction of the OAM.
 - .4 Chance Find Discovery: An unanticipated discovery of cultural resource site or material (artifacts/features) during construction in areas with no previously identified cultural resources.
 - .5 Culturally Modified Tree (CMT): a term which describes the modification of a tree by indigenous people as part of their traditional use.
 - .6 Cultural Resource (CR): a human work, an object or a place that is determined, on a basis of its heritage value, to be directly associated with an important aspect or aspects of human history or culture.
 - .7 Cultural Resource Site (CRS): a location that contains a human work, object, or a place that is defined to be of heritage value. This includes archaeological, historical and traditional use sites, and culturally modified trees (CMTs). The OAM must be on-site during construction in these designated areas. The OAM has the authority to stop work in regards to cultural resource requirements.
 - .8 Historical site (HS): Within the Parks Canada framework, historic is used in its broadest meaning to define the value of a cultural resource based on having heritage value. Within this framework, cultural materials 40 years or older may be considered as a historical site or historical object.
 - .9 Mineral Subsoil: Boulders, cobbles, gravel, sand, clay, and silts.
 - .10 Organic Soils: Litter-fibric-humic (LFH) layer and upper mineral A horizon, topsoil.
 - .11 Owners Archaeological Monitor (OAM): an individual retained by Parks Canada to assess and monitor for the presence/absence of cultural resource sites and recommend and implement mitigations if Chance Finds are encountered.
 - .12 Owners Environmental Monitor (OEM): an individual retained by Parks Canada to be onsite at all times during construction and will have the authority under the DR to direct the Contractor with regards to installing, maintaining and removing temporary environmental procedures and ensuring that appropriate installation and maintenance measures are followed. The OEM will also have the authority to shut down construction, especially during heavy rainfall events, or other events that preclude effective environmental mitigation. The Contractor will therefore NOT be required to hire a separate Environmental Monitor.
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- .13 Owners First Nations Monitor (OFNM): an individual retained by Parks Canada to monitor during construction. The OFNM may work directly with the OEM and OAM, and /or independently.
 - .14 Surveillance Areas (SA): locations identified during the archaeological impact assessments and inventories where cultural deposits are considered to have a moderate to high probability of occurring but are not likely to be identified during an inventory study (e.g., wet sites, deeply buried sites, isolated finds). The SAs will require surveillance in the form of field check-ins, the frequency and duration of which will be determined by the OAM in consultation with First Nations, Parks Canada, and Pacific Rim National Park Reserve. The controlled excavation methodology will only be followed in SAs if the OAM determines it is necessary to sample a selection of the organic soils or mineral subsoils for cultural materials and/or if cultural deposits are encountered.
 - .15 Traditional Use site (TUS): Landforms, natural features, cultural features or other locations of spiritual, cultural or other significance to an Indigenous community.
 - .16 Grice Bay site – Is accessible from the existing parking lot on Grice Bay approximately 4 km north of Highway 4 and west of the Tofino Airport.
- 1.5 Regulatory Overview .1 Comply with all applicable laws, regulations, and requirements of Federal, Provincial, and other regional authorities, and acquire and comply with such permits, approvals and authorizations as may be required.
- 1.6 General .1 The Owners Archaeological Monitor(s) (OAM) and Owners First Nation Monitors (OFNM) will be retained directly by the Owner. The OAM will have the authority to stop work in regards to cultural resource requirements.
- .2 Contractor will provide a minimum of 10 working days' notice for scheduling information to the OAM to enable on site monitoring coordination when needed or reasonably expected to be needed.
 - .3 For all persons working for the contractor and subcontractors, cultural resource awareness training shall be a component of the initial contractor orientations and of the daily tailgate meetings. This will include training on the Chance Find Procedures.
 - .4 Contractor shall coordinate and permit the OAM time to monitor the excavated material. Contractor will not be compensated for any loss of production time where the site can be bypassed and the work continued. A delay claim shall only be considered if the Contractor is not able to continue work at a productive rate and for delays in excess of those defined in clause 1.6.5 below.
 - .5 In known Cultural Resource Site areas, the contractor should anticipate delays and include the cost of these delays in the unit prices tendered for excavation of materials in the CRS areas. The following duration of delay at
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each site shall be included in the rates: 2 hours per 8 hour working day shall be accumulated for each site. Upon completing work at each CRS, if the accrued delay time averages over 2 hours per 8-hour work day averaged per working week, an additional payment shall be made at a time and materials rate for the time in excess of the average of 2 hours. The contractor must record the duration and location of each delay and agree to delays with the DR on a daily basis.

- .6 Due to the significance of cultural resources within Pacific Rim National Park Reserve, Chance Find Procedures will apply for the whole length of the Trail.
- .7 All cultural resources regardless of age and condition are protected under the Canada National Parks Act. The Contractor and workers shall stop work and protect any artifacts and/or features found and request direction from the DR and OAM before proceeding with their work. No archaeological or historical artifacts shall be intentionally moved. It is illegal to remove archaeological or historical artifacts from the Pacific Rim National Park Reserve.
- .8 Within CRS, CRMZ, and SA sites, the contractor shall avoid repeated traversing of heavy equipment over the unexcavated site to avoid damage to cultural deposits. The contractor shall grub and excavate organic soils and mineral subsoils sequentially along the trail and remove from site without traversing over the organic soils and mineral subsoils, except where approved by the DR using low impact methods.

1.7 Archaeological Monitor

- .1 The OAM must be present during the entire period of clearing and grubbing and any construction within known cultural resource sites (approximately 150 m of trail length), CRMZ (approximately 50 m) and SA (approximately 50 m) identified prior to contract award and any other cultural resource sites identified during construction to record and collect any observed cultural resource. The OFNM, as available, may be present during any construction within cultural resource sites identified prior to contract award and any other cultural resource sites identified during construction to record and collect observed cultural resource deposits, as appropriate.
 - .2 The DR and OAM will conduct a walk-through of each site ahead of any ground disturbance with the successful contractor to discuss the best approach for construction. Cultural resource concerns at each site will be identified. Where more sensitive features/ materials are present and to be avoided, the OAM will advise the most appropriate approach and flag any additional limitations/ constraints for the site. Any special considerations, such as lack of space for spreading of cultural sediments from within the site, or any contractor concerns will be highlighted for review by the DR and the Owner.
 - .3 The Contractor shall provide a minimum of ten working days' notice for the 150 m section of trail and work in each culturally sensitive site area (e.g.
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- Cultural Resource Site, Culturally Modified Tree Sites).
- .4 Any unnecessary callouts/misuse of the allotted OAM time may/will be paid for by the contractor.
- 1.8 Cultural Resource Sites .1 Method of excavation shall be coordinated with the DR and OAM and is outlined in Clause 3.0 *Controlled Excavation Methodology* below.
- .2 All excavated organic soils shall stay within the defined cultural resource site unless otherwise approved by the OAM and DR. Organic soils shall be spread within the site under the direction of and to the satisfaction of the DR, OAM and OEM. If it is not feasible to retain the organic soils and mineral subsoils from cultural resource sites within the area/CRS, it will be transported to a designated location at Grice Bay site in separate loads (e.g., not mixed with organic soils or mineral subsoils from other areas or non-cultural deposits) under the direction of the OAM. The piles of mineral subsoils from the CRSs will be stockpiled at the Grice Bay site location and will be kept in discrete piles, with a record and on-site marker kept of the location of each stockpile and which CRS it was removed from. This will facilitate the cultural resources assessment and management of these materials by the OAM. In cases where no cultural deposits are found within the excavated mineral subsoils, they shall be removed from the site and may be disposed at the J. Robbins site, with the approval of the OAM. The contractor shall receive payment for this excavation, hauling, placing, and disposal per clause 1.1.3 above.
- .3 The upper organic soils being stripped for trail construction from known cultural resource sites shall remain on site, as per clause 1.8.2 above, and shall be distributed evenly back into the forest up to six (metres on either side of the trail clearing where appropriate, with a maximum depth of 150mm, and under the direction of the OAM, DR, and OEM. Spreading of organic soils can be aided by excavation equipment 'sprinkling' the organic soils while depositing it and re-spreading it after deposit. The equipment tracks must remain within the cleared trail limits. Where the equipment arm can reach into the forest without scarring or damaging trees, machine spreading is permitted. Manual spreading by trail contractor shall be used if necessary, to obtain a uniform thickness as directed by the OEM, OAM, and DR.
- .4 Excess material from the organic soils being stripped for trail construction may be removed from a CRS at the discretion of the OAM and OEM and disposed at the designated Grice Bay location in separately identified piles, as per clause 1.8.2. It is anticipated that up to 1.8 cubic metres of organic material per linear metre of trail in CRS zones will be cast into the forest and the remainder will be disposed of at the designated Grice Bay site, as directed by the OAM.
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- 1.9 Culturally Modified Tree Sites
- .1 Due to the sensitivity of the culturally modified tree (CMT) sites, the Contractor will be notified of their locations once the Contract has been awarded.
 - .2 Several areas along the trail work zone contain CMT's. These sites have been avoided by trail routing but the Contractor and all sub-contractors are required to be aware of the site locations and to avoid them.
 - .3 It is not anticipated that the Contractor shall be required to remove CMT's. However, should CMT's be identified by the contractor within the areas to be cleared, the DR shall be notified immediately.
 - ~~.4 Hand falling and hand sectioning of selected CMT's will be determined by the OAM and DR and completed under the guidance of the OAM. Costs associated with this work will be considered incidental to clearing and grubbing.~~

- 1.10 Related Sections
- .1 Section 01 35 43 – Environmental Procedures.
 - .2 Section 31 11 00 – Clearing and Grubbing.
 - .3 Section 31 14 13 – Trail Work, Soil Stripping, Stockpiling and Re-spreading.
 - .4 Section 31 23 33 – Excavation, Trenching, and Backfilling.
 - .5 Section 31 93 02 – Invasive Species Control.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

- 3.0 Controlled Excavation Methodology
- .1 In CRS, CRMZ and SA sites, machine excavation will proceed in incremental depths between 10 - 30cm maximum. At the discretion of the OAM, the Contractor shall allow time for a sample of machine excavated materials to be raked and/or screened through 1/4" mesh to find artifacts, faunal material, and other potential diagnostic items, which will be collected for analysis. Contractor will be compensated for any loss of production time only as defined in Clause 1.6.5 above.
 - .2 All machine excavation in CRS and CRMZ will be conducted with a smooth edged/finishing bucket under the direction of the OAM. The OAM may require a sampling of areas in the SAs to be excavated with a similar technology to assess sediments for cultural materials. This methodology may also be applied in the event of Chance Finds (Clause 3.1 below) at the discretion of the OAM.
 - .3 In cases where no cultural deposits are found within the excavated organic soils, some of the organic soils may be removed from a CRS at the discretion of the OAM and OEM and disposed at the designated Grice Bay site only, with the approval of the OAM, as per Clause 1.8.3 above.
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- .4 In cases where no cultural materials are found within the excavated minerals subsoils, sediments shall be removed from the site and disposed at the designated disposal site at J. Robbins site with the approval of the OAM.
- 3.1 Chance Finds Procedure
- .1 The Chance Finds Procedure will be implemented to minimise the risk of inadvertent impact to cultural resource sites, particularly in the case where potential cultural deposits or features are identified in the absence of the OAM. It is crucial in implementing this Procedure that construction personnel understand that they are not expected to interpret the origin, integrity or significance of potential cultural deposits.
 - .2 ‘Cultural Resource Awareness’ training shall be a component of the initial contractor orientations for all persons working for the contractor and all daily tailgate meetings. The training program includes a review of this Procedure.
 - .3 The most common chance finds site types which may be encountered are:
 - .1 Pre-Contact Archeological Sites – These sites can include artifact scatters, shell middens, shell-less middens, rock art, culturally modified trees (CMTs), waterlogged organic materials, and trails.
 - .2 Found or suspected Human Remains.
 - .3 Historical Sites – These sites can include historical artifacts and structures, and historical refuse such as crockery, metal and glassware indicating presence of historical camp sites, shipwrecks, cabins, temporary shelters, or sites associated with early logging and mining.
 - .4 If potential cultural deposits, artifacts, human remains or suspected human remains, or features are identified, the following procedures WILL be immediately implemented:
 - .1 STOP ground disturbance work immediately that could cause additional damage to cultural deposits and retain potentially cultural deposits on-site so it may be inspected by the OAM (i.e., do not release dump truck if loaded with fill from the suspected location).
 - .2 Immediately inform DR and OAM.
 - .3 Record location of the find:
 - .1 Date (when the find was encountered).
 - .2 Observer (name of the person recording information about the find).
 - .3 Location of Find (Labelled flagging so that it may be relocated, GPS coordinates if possible).
 - .4 Type of find (e.g., archaeological, historical, suspected human remains).
 - .5 Description of the obvious disturbance to the find (by
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equipment, work, erosion etc.).

- .6 Photograph of find, with scale in photograph if possible. In the case of suspected human remains photographs are only be permitted to be taken by the OAM, DR or PCA delegate for the purpose of confirming if the remains are human, and document and maintain chain of custody.
- .5 Be prepared to initiate work at another location under direction of the DR while archaeological testing and/or mitigation is conducted. Work may only continue in the location of the Chance Find under the direction of the OAM or DR.
- .6 In the event that a chance find is confirmed to be of found human remains, local law enforcement police will be informed by the DR or OAM. The human remains must be accorded full dignity and respect by prohibiting public access and photography. A cover will be placed over any exposed bones with plastic sheeting, blanket, or other clean covering (not back fill). If the affected location is busy or has high public visibility, a delegate of the contractor will be assigned to stand watch and secure the location until the DR is able to have a representative of the Owner relieve the contractor employee. The secured watch will continue until the OAM and local policing authorities are on site.

3.2 Monitoring

- .1 Monitoring may be required where Chance Finds are identified.
- .2 Site visits and/or monitoring outside of CRS, CRMZ's and SA locations may occur by the OAM and/or FNM.
- .3 Monitoring within CRS, CRMZ and SA locations will be conducted under the direction of the OAM. Prior to ground disturbance, the ground surface will be inspected by the OAM for cultural deposits or features. The ground alteration activities will be inspected while in progress. If organic soils or mineral subsoils with potential for cultural deposits are to be excavated, then a sample of those soils will be visually examined for cultural deposits. The size of the sample of soils to be inspected through raking and/or screening will be determined in the field by the OAM.
- .4 Cultural deposits identified during monitoring will be documented, photographed, and georeferenced in the field by the OAM.

END OF SECTION
